

REMARKS

Claims 1-9 and 11-17 are now pending in the application. Claims 1, 4, 6 and 8 have been amended. Claim 10 has been cancelled. Claims 11-17 have been added. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

REJECTIONS UNDER 35 U.S.C. § 102 AND §103

Claims 1, 4 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Thenappan et al. (U.S. Pat. No. 6,010,997). Claims 1, 2, 4 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Thenappan et al. (U.S. Pat. No. 6,048,832). Claims 1, 4, 6 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Doyel et al. (U.S. Pat. No. 6,689,734). Claims 2, 3, 5, 7 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Doyel as applied to the above claims. These rejections are respectfully traversed.

Amended claims 1-7

Claims 1, 4 and 6 have been amended such that the content of at least either nitromethane or nitroethane is 20 through 50 wt% with respect to the entire amount of solvent. We believe that claims 1-7 are now novel over and non-obvious from Thenappan '997, Thenappan '832, and Doyel.

The present invention relates to solvents for dissolving plastics such as resin. The present solvent according to claims 1-7 contains nitroethane and/or nitromethane. As described in the specification of the present application, "the ability to dissolve resin

increases as the content amount of nitroethane is increased" (page 8, lines 24-25), and "results similar to those for when using nitroethane are obtained even when using nitromethane instead of nitroethane" (page 10, lines 27-29). Therefore, it can be stated that a more effective plastic-dissolving agent can be obtained by setting the content of nitroethane and/or nitromethane to a higher percentage (but lower than a percentage (e.g., 55 wt%) where flammability becomes present (page 8, lines 29-30)).

On the other hand, Thenappan '997, Thenappan '832, and Doyel all relate to solvents for cleaning or degreasing. Thenappan '997 discloses a solvent containing 1-11% nitromethane, Thenappan '832 discloses a solvent containing 3-11% nitromethane, and Doyel discloses a solvent containing 0.1-16 wt% nitromethane.

However, the solvents disclosed in those references are solvents for cleaning and degreasing, and not for dissolving plastics as in the present invention. Therefore, there is no need to set the content of nitromethane in those cleaning solvents to such a high percentage as 20-50 wt% to increase the ability to dissolve plastics such as resin. Therefore, Thenappan '997, Thenappan '832, and Doyel could not have suggested setting the content of at least either nitromethane or nitroethane to 20 through 50 wt% with respect to the entire amount of solvent. Accordingly, we believe that claims 1-7 are now novel over and non-obvious from Thenappan '997, Thenappan '832, and Doyel.

Amended claims 8 and 9

Claim 8 is amended such that the content of N-methyl pyrrolidone is 10 through 85 wt% with respect to the entire amount of the solvent (which content corresponds to

the limitation of original claim 10). We believe that claims 8-9 are now non-obvious from Doyel.

As described above, the present invention relates to solvents for dissolving plastics such as resin. The present solvent according to claim 8-9 contains N-methyl pyrrolidone. As described in the specification of the present application, "the solvents including N-methyl pyrrolidone are very preferable since their ability to dissolve plastic does not weaken even when the content amount of N-methyl pyrrolidone is 50 wt% or more compared to the solvents including nitroethane or nitromethane" (page 11, lines 28-30). This suggests that the larger the amount of N-methyl pyrrolidone, the higher the ability to dissolve plastics becomes.

On the other hand, as described above, Doyel relates to solvents for cleaning or degreasing, and not for dissolving plastics as in the present invention. Therefore, there is no need to set the content of N-methyl pyrrolidone in Doyel's cleaning solvent to such a high percentage as 10-85 wt% to increase the ability of dissolving plastics. Therefore, Doyel could not have suggested setting the content of N-methyl pyrrolidone to 10 through 85 wt% with respect to the entire amount of solvent. Accordingly, we believe that claims 8-9 are not obvious from Doyel.

New claims 11-17

New claims 11-17 relate to plastic-dissolving solvents comprising isopropyl bromide and/or n-propyl bromide, and only nitroethane (no nitromethane). We believe that these claims are novel over and non-obvious from Thenappan '997, Thenappan '832 and Doyel.

That is, none of the Thenappan '997, Thenappan '832, nor Doyel discloses a plastic-dissolving solvent containing nitroethane and isopropyl bromide and/or n-propyl bromide. They merely disclose cleaning solvents containing nitromethane. Further, the Examiner states nothing about those references disclosing a solvent containing nitroethane. Therefore, the composition according to new claims 11-17 could not be anticipated by nor could be obvious from those references.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: Feb 17, 2005

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